

SECTION 1000 - SITE PREPARATION

1001 SCOPE. This section covers the necessary clearing, grubbing, demolition, and other appurtenant work at the locations shown on the contract drawings.

1002 DEFINITIONS.

- a. Clearing. Clearing shall consist of the removal of all vegetable matter, such as trees, brush, down timber, rotten wood, sod, rubbish, and other objectionable combustible materials found on or above the surface of the site. It shall include the removal of wood buildings, fences, lumber, waste dumps, abandoned utilities, and trash, the salvaging of such materials as may be specified, and the disposal of the debris.
- b. Grubbing. Grubbing shall consist of the removal of all stumps, roots, buried trees and brush, and other objectionable combustible materials appearing on or below the surface of the ground which has not been included under the definition of "*Clearing*" above.
- c. Demolition. Demolition shall consist of the destruction and removal or incorporation into embankment all non-vegetable matter appearing above, on, or below the ground surface. This shall include, but not be limited to, all material derived from the demolition of portland cement concrete items such as base courses, curbs, curb and gutters, sidewalks, floors, steps, driveways, drainage structures of all sorts, guard fences, and other miscellaneous items such as foundations or walls of any sort, and iron or steel items, and asphaltic items such as pavement and base courses.
- d. Trees. Vegetable growth forty (40) inches or greater in circumference, measured two (2) feet above the ground shall be classified as a tree.
- e. Brush. Vegetable growth less than forty (40) inches in circumference, measured two (2) feet above the ground shall be classified as brush.

1003 UTILITY COORDINATION. The contractor shall be responsible for protecting any improvement of any agency, public or private, in the vicinity of clearing, grubbing or demolition operations. When necessary, the contractor shall enlist the assistance of the affected agencies in the location of their utilities. The contractor shall be responsible for the cost of all damage to such facilities arising from his carelessness or negligence.

1004 LIMITS OF CONSTRUCTION. The limits for clearing, grubbing, and demolition shall be as defined on the plans or specified in the Special Conditions but in no case shall work extend beyond the limits of the right-of-way, city property lines, or easements.

1005 PROGRESS OF CONSTRUCTION.

- a. Clearing. Clearing shall proceed well in advance of the construction operation so as not to delay the progress of the work. The refuse resulting from clearing may be hauled to a waste site secured by the contractor or shall be burned or buried in such a manner as to meet all laws, regulations, and requirements of any governing authority regarding health, safety, and public welfare. When authorized by the fire department, the contractor may dispose of such refuse by burning on the site of the project, provided all requirements as determined by Gardner Public Safety are met. Under no circumstances will the authorization to burn on the site relieve the contractor in any way from damages which may result from his operations. In no case shall any materials be left on the project site, shoved into abutting properties, or buried in embankments or trenches on the site.
- b. Grubbing. **Erosion control measures shall be in place prior to the start of grubbing operations.** Grubbing shall parallel the clearing as nearly as the sequence of operations will permit. Except for the special circumstances enumerated below, all stumps, roots, and other objectionable matter within the construction area shall be removed to a minimum depth of twelve (12) inches below the subgrade or the original ground, whichever is lower. All stumps, roots, and other objectionable matter outside the limits of the construction area but within the right-of-way shall be cut off flush with the ground.

All stumps, roots, and other objectionable matter within the specified limits of embankments having a depth of two (2) feet or less shall be removed and disposed of. Piling and butts of utility poles within the limits shall be removed to a minimum depth of two (2) feet below the subgrade or the original ground, whichever is lower.

All stumps, roots, and other objectionable matter found within borrow material to be used for embankment or fill material shall be removed.

All stumps, roots, and other objectionable matter found within the bottoms or sidewalls of excavation and trenching areas shall be completely removed from the respective bottom areas, and removed to a minimum depth of twelve (12) inches below the respective sidewalls.

- c. Demolition. Demolition work shall occur well in advance of the construction operation. Masonry and concrete walls, miscellaneous foundations, or other objects extending below ground shall be removed to a depth of at least twelve (12) inches below the original ground or the subgrade, whichever is lower.

When explosives are used in demolition, the contractor shall comply with the provisions of Specification Section 6100 *Blasting*.

In removing items such as portland cement concrete pavement, base courses, curbs, curb and gutters, gutters, sidewalks, and similar objects where portions of said objects are to be

left in place, they shall be removed to an existing joint or to a new joint sawed to a minimum depth of one (1) inch with a true line and vertical face. Sufficient portions of these objects shall be removed to provide for the proper grade and connection to the new work.

1006 PROTECTION OF TREES AND SHRUBS. During construction operations, the contractor shall leave in place and protect from damage all trees, shrubbery, and flower beds unless shown on the drawings to be removed. Where trees existing on the project site are not to be removed, it shall be the responsibility of the contractor to trim low branches which would interfere with the normal operation of his equipment. The trimming shall be performed in a professional manner prior to any machine operation.

1007 CONSTRUCTION STAKING. The engineer shall, unless otherwise provided for, set construction stakes establishing lines, slopes, profile grades in roadway work, and center line and bench marks (hubs) for structure work and appurtenances as he may deem necessary and shall furnish the contractor with all necessary information relating to lines, slopes and grades. These stakes and marks shall constitute the field control by and in accordance with which the contractor shall establish other necessary controls and perform the work.

The contractor shall be responsible for giving the engineer reasonable notice of intent to perform work in a particular area of the project in order to afford the engineer sufficient time to set construction stakes establishing, lines, slopes and profile grades. For roadway work, the engineer will set construction stakes establishing, lines, slopes and profile grades and will furnish the contractor with all necessary information relating to these lines, slopes and grades. These stakes and marks will constitute the field control by and in accordance with which the contractor shall establish other necessary controls and perform the work. For structures, the engineer will stake and reference those center lines and layout lines used as dimensional references on the plans and provide a bench mark (hubs) at each structure location. The contractor shall be responsible for all other lines, locations, alignment, grade elevations and any other necessary control by use of engineering instruments or other tools or methods as required to build the structure.

The contractor shall be responsible for the preservation of all stakes and marks, and if any construction stakes or marks are destroyed or disturbed, the cost of replacing them may be charged against the contractor and deducted from the payment for the work.